UNITED STATES COOK CREEK RESERVOIR QUADRANGLE OPEN-FILE REPORT DEPARTMENT OF THE INTERIOR MONTANA This report has not been edited for conformity with U.S. Geological Survey editorial standards or GEOLOGICAL SURVEY 7.5 MINUTE SERIES (TOPOGRAPHIC) stratigraphic nomenclature. 106°15′ 45°45′ 106°07′30″ 45°45′ 0.34 0.29 1.13 0.96 0382 3.05 7 80,88 1559 24 R(85%) 20 0.04 4.78 4.06 12.86 5.83 4.95 EXPLANATION NON-FEDERAL COAL LAND-Land for which the R(85%) Federal Government does not own the coal rights. 3.15 2.67 23.76 20.20 STRIPPING-LIMIT LINE—Boundary for surface mining 28 of the coal bed (in this quadrangle, the 500-foot overburden isopach). Arrows point toward the area RB R(85%) suitable for surface mining. Recovery factor of 85 per-0.07 0.06 R(85%) cent within that area in this quadrangle. 0.59 3.49 2 96 2.49 2.12 12.34 10.49 0.46 0.54 BOUNDARY OF COAL 5 FEET OR MORE THICK— Drawn along the outcrop of coal bed and/or the inferred contact between burned and unburned coal, and/or the 5-foot coal isopach. Arrows point toward area of coal 5 feet or more thick. POINT OF MEASUREMENT ON COAL BED 32 34 R(85%) 4 12 3 50 R(85%) 17 77 15 10 7.26 6 17 5 25 4 47 18.89 16 06 2 15 1.83 T. 2 S. R(85%) R(85%) 38 01 32 31 Point of measure of coal bed R(85%) 3 08 0.08 0.07 2.77 6.99 5.94 24.33 20.68 R(85%) 0.71 0.61 0.82 0.70 SI 3 4.94 4 20 0.10 HYP 10 Inferred 33.12 resources 15.50 4.97 HYP 37.75 32.09 021HYP RB R(85%) 46.91 39.87 6.18 5.25 47.79 HYP 27.06 23.00 20.19 17.16 2.59 2.20 0.92 40.93 HYP 18 15 1.78 13 14 7.00 HYP 1.77 HYP DIAGRAM SHOWING COMPONENT AREAS OF IDENTIFIED COAL RESOURCES—Shows arcuate boundary lines enclosing areas of measured, indicated, 30.16 and inferred coal resources. Boundaries of areas are 47.27 0.38 HYP 27.93 24 dashed where projected from an adjacent quadrangle. Areas of measured, indicated, or inferred resources may be present on this map without their outer boundaries being shown. Coal resources beyond the 20 23 4.26 inferred category are hypothetical resources. RB 49.79 HYP 1.49 1.26 1.39 28.43 9.73 8.27 9.32 HYP (Measured resources) R(85%) (Indicated resources) 12.46 10.59 (Inferred resources) (Hypothetical resources) IDENTIFIED AND HYPOTHETICAL COAL 0.12 RESOURCES-Showing totals for Reserve Base (RB), Reserves (R), and Hypothetical (HYP) resources, in R(85%) millions of short tons, for each section or part(s) of a section of Federal coal land within the stripping-limit line. Dash indicates no resources in that category. 35.25 Reserve Base (RB) X the Recovery Factor (85 percent)= Reserves (R). 49.47 58.20 5.76 4.90 (Measured resources) 30 55.57 (Indicated resources) (Inferred resources) 25.59 HYP (Hypothetical resources) IDENTIFIED AND HYPOTHETICAL COAL 34.30 RESOURCES—Showing totals for Reserve Base (RB) 1.79 HYP and Hypothetical (HYP) resources, in millions of short tons, for each section or part(s) of a section of Federal EN-SL 57.37 48.77 coal land outside the stripping-limit line. Dash indicates 12'30" no resources in that category. Compiled in 1977 SCALE 1:24000 Base map from U.S. Geological Survey, 1966 To convert short tons to metric tons, multiply short tons by 6000 0.9072.1 KILOMETER To convert feet to meters, multiply feet by 0.3048. 0°51′ 15 MILS To convert miles to kilometers, multiply miles by 1.61. MONTANA NOTE: Recovery factors have not been established for UTM GRID AND 1966 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET underground development of coal in this quadrangle. Therefore, Reserves (R) were not calculated for the coal COAL RESOURCE OCCURRENCE MAP OF THE COOK CREEK RESERVOIR bed in areas outside the stripping-limit line.

QUADRANGLE, POWDER RIVER AND ROSEBUD COUNTIES, MONTANA

BY

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PLATE 27

AREAL DISTRIBUTION AND TONNAGE

MAP OF IDENTIFIED AND

HYPOTHETICAL RESOURCES OF

THE KNOBLOCH COAL BED